

\* UMASS/AMHERST \*



312066 0271 3440 4



15781  
SS ED 29.2: D83/987-88

RECEIVED

NOV 6 1989

DOCUMENTS  
COLLECTION

# Massachusetts Dropout Report

## 1987-88

GOVERNMENT DOCUMENTS  
COLLECTION

MAR 30 1990

University of Massachusetts  
Depository Copy

June 1989

Office of Planning, Research & Evaluation  
Massachusetts Department of Education

13147

## **Massachusetts Board of Education**

**James F. Crain, Gloucester, Chairperson**  
**Raquel Bauman, Holden, Vice Chairperson**

**Joseph E. Killory, Sandwich**  
**John J. Gould, Waltham**  
**James R. Grande, Hanover**  
**Susan J. Hubbard, Winthrop**  
**Sol Kolack, Newton**  
**Anne S. Larkin, Bedford**  
**Theodora A. Sylvester, Springfield**  
**Frances M. Turner, South Egremont**  
**Joan Wallace-Benjamin, Boston**  
**Mary C. Wright, Falmouth**

**Harold Raynolds, Jr., Commissioner of Education, Secretary**  
**Franklyn G. Jenifer, Chancellor, Board of Regents, Ex Officio**

## **Office of Planning, Research and Evaluation**

**Barbara Brauner Berns, Director**  
**Jeff Nellhaus, Educational Specialist, Author**  
**Cary Aufseeser, Coordinator for Data Analysis**  
**Virginia Crocker, Principal Planner**  
**Linda Wiggin, Research Consultant**

## **Bureau of Data Collection and Processing**

**Thomas Collins, Director**  
**Mary Jane McDonnell, Educational Specialist**  
**Thomas Hogan, Programmer**  
**Robert Oris, Programmer**  
**Susan Perry, Assistant Supervisor**  
**Nancy Connolly, Statistical Clerk**

---

**The Massachusetts Department of Education insures equal employment/educational opportunities/affirmative action regardless of race, color, creed, national origin or sex, in compliance with Title VI and Title IX, or handicap, in compliance with section 504.**

**Publication #15986**  
**Approved by Ric Murphy, State Purchasing Agent**

# Executive Summary of Massachusetts Dropout Data for Grades 9-12 1987-88

- In 1987-88, there were 258,546 students enrolled in grades 9-12. From this population, 13,983 students, who were at least 16 years old, withdrew from school for reasons other than transferring to another school or graduating. This represents an annual dropout rate of 5.4 percent.
- Twenty percent of the prospective class of 1991 may not graduate if current annual dropout rates persist over the next few years.
- Annual dropout rates varied widely among school districts ranging from less than one percent to nearly 17 percent. In nearly three-quarters of the districts annual dropout rates were below the statewide average of 5.4 percent, while in 19 districts annual rates exceeded 9 percent.
- As compared to the 1986-87 annual dropout rate of 5.3 percent, the 1987-88 rate increased by one tenth of one percent. The slight increase in the dropout rate over the two-year period is not statistically significant.
- Dropout rates varied by grade. The percentage of 10th and 11th graders who dropped out at 6.5 and 6.2 percent, respectively, was greater than the percentage at any other grade level. The percentage of 12th grade dropouts was lowest at 3.8 percent, while the percent of 9th grade dropouts was at 5.0 percent.
- The percentage of males who dropped out (6.2 percent) was higher than the percentage of females who dropped out (4.6 percent). This was consistent with the previous year in which proportionately more males than females dropped out.
- A disproportionate number of dropouts were racial/ethnic minorities. The annual dropout rate was 14.4 percent for Hispanic students; 10.6 percent for Black students; 11.8 percent for Native American students; and 4.8 percent for Asian students.
- At an annual rate of 4.4 percent, proportionately fewer White students dropped out than other racial/ethnic groups; however, 72 percent of the dropouts (9,907 students) were White.
- The annual dropout rate for urban school districts was significantly higher than the rate for non-urban districts. A total of 9,274 students dropped out of urban school districts (66 percent of the total pool of dropouts). This represents an annual rate of 8.9 percent.
- There were moderate differences in annual dropout rates among the various kinds of non-urban school districts. Rates ranged from 1.4 percent for residential suburbs to 4.4 percent for rural economic centers.



## Table of Contents

Purpose .....	2
The Dropout Problem: A Growing Concern .....	3
Methodology .....	4
Database	
Definitions	
Statewide Results .....	5
Summary of Annual and Four-Year Results	
Dropout Rates .....	6
Grades 9-12 Dropouts	
Grades 6-8 Dropouts	
Dropouts by Grade	
Dropouts by Racial/Ethnic Group	
Dropouts by Kind of Community	
Conclusion .....	10
Appendices .....	11
Appendix A: Sources of Data	
Appendix B: Calculation of Projected Four-Year Dropout Rate	
Appendix C: Annual and Four-Year Dropout Rates by School District	
Appendix D: Kind of Community Listing	

### Tables

<b>Table 1:</b> Massachusetts Dropout Data, Annual and Projected Four-Year Dropout Rates, 1987-88 .....	5
<b>Table 2:</b> Two-Year Comparison of Annual Dropout Rates Statewide .....	6
<b>Table 3:</b> Two-Year Comparison of Annual Dropout Rates by Grade .....	7
<b>Table 4:</b> Two-Year Comparison of Annual Dropout Rates by Gender .....	7
<b>Table 5:</b> Two-Year Comparison of Annual Dropout Rates by Race/Ethnic Group .....	8
<b>Table 6:</b> Two-Year Comparison of Annual Dropout Rates by Kind of Community .....	9

### Figures

<b>Figure 1:</b> Distribution of Annual Dropout Rates, Grades 9-12, 1987-88 .....	6
<b>Figure 2:</b> Annual Dropout Rates by Grade, 1987-88 .....	7
<b>Figure 3:</b> Annual Dropout Rates, Grades 9-12, By Race/Ethnic Group, 1987-88 .....	8
<b>Figure 4:</b> Total Enrollment/Total Dropouts Minority and 87-88 .....	8
<b>Figure 5:</b> Annual Dropout Rates, Grades 9-12, By Kind of Community, 1987-88 .....	9
<b>Figure 6:</b> Total Enrollment/Total Dropouts Urban and Non-Urban Districts Gr. 9-12, 1987-88 .....	9

## Purpose

The Massachusetts Department of Education, under the authority of Chapter 188, the Massachusetts Public School Improvement Act of 1985, conducts an annual survey to determine the number of students leaving school prior to graduation. The first survey was conducted in the spring of 1987, and the results are reported in the *Massachusetts Dropout Report for 1986-87*. The second survey reported on here summarizes data on Massachusetts public school dropouts for the 1987-88 period.

The purpose of the report is to describe the dropout problem in the Commonwealth by identifying and quantifying who is dropping out, and by describing changes in the patterns of dropouts in the state over the past two years. Dropout information contained in this report is also designed to assist state and local policy makers in the development, implementation, and evaluation of various dropout interventions. We hope the report will be valuable to educators, business and community leaders, parents and students.

# The Dropout Problem: A Growing Concern

Dropping out is not a new phenomenon. According to the 1980 U.S. Census, over one million adults in Massachusetts have not completed high school. Nationally, there are approximately 25 million dropouts and estimates indicate that nearly 750,000 students drop out each year. Although the dropout problem has always drawn public attention, there is a growing concern about it today.

## *Dropouts Are Ill-Prepared for Today's Work Place*

Among the factors triggering concern about dropouts is the increasing demand for a broadly-educated work force. Whereas in the past industries could absorb poorly educated individuals to carry out simple, repetitive tasks, today's technology-oriented companies need people who can communicate effectively, solve problems, work as part of a team, and adapt to rapidly changing job requirements. Dropouts are ill-prepared for such work. In Massachusetts, where three out of four jobs already require some training after high school, and where the number of new entrants into the work force is declining, the need to provide all students with basic academic skills is essential to maintain the state's current economic standard.

## *Dropouts Are a Social Burden*

No less troubling is the burden dropouts place on society. Overall, national estimates indicate that dropouts require 35 percent more social services than high school graduates. Compared to their graduating peers, today's dropouts are more likely to become tomorrow's welfare and Medicaid recipients, prisoners, drug abusers, and homeless.

## *Dropouts Face High Personal Costs*

In addition to societal costs, the personal costs of dropping out are also high. Most dropouts are faced with the psychological and social stigma of their actions. While dropouts' self-esteem may rise in the first three to six months after leaving school, it usually falls soon thereafter when they are faced with the reality that they lack the skills and knowledge to fulfill their dreams. National statistics indicate that earnings for dropouts decreased by more than 25 percent over the past three decades. Even high school graduates saw their incomes drop by nine percent over this period, while those of college graduates rose six percent.

## *The Dropout Problem Could Worsen*

Changing demographics make the dropout problem even more alarming. In Massachusetts' urban areas nearly one out of four students live in poverty today, and projections indicate that this ratio will increase over the next decade. This is significant because the disadvantages associated with children living in poverty frequently appear to be at the root of the dropout phenomenon. Clearly, the number of dropouts may increase unless schools and communities can better serve all students, especially those who are from less affluent households.

# Methodology

## Database

Dropout data presented in this study were reported by individual schools in the *Chapter 188 Individual School Report for 1987-88*. Schools reported dropouts over a 12-month period, from July 1, 1987 to June 30, 1988, by the number of male and female students in five racial/ethnic groups across grades 6 through 12. School building data were aggregated to both the district and state levels.

Dropout figures provided in this report are based upon the responses of 379 schools in 250 school districts. This represents a complete census of the schools in the Commonwealth containing any of the grades 9 through 12.

Readers of this report should bear in mind that, as in any survey research, the accuracy of the data provided is limited by such factors as the design of the survey, and reporting and processing errors. The Department of Education has attempted to minimize these errors by conducting workshops and providing ongoing technical assistance to school personnel completing the survey.

As an additional check on the accuracy of the self-reported dropout data, the number of dropouts reported for 1987-88 was compared with the number of dropouts reported for 1986-87 for each school. When schools showed a significant change in the number of dropouts over the two year period, they were asked to confirm the number of dropouts reported each

year. Through this procedure reporting errors were uncovered and corrected for a number of schools. The most common error schools identified was the inclusion of student transfers in their dropout figures.

## Definitions

**The Chapter 188 Individual School Report defines a dropout as a student 16 or older who leaves school prior to graduation for reasons other than death or transfer to another school.**

Two types of dropout rates are provided in this report: annual rates and projected four-year rates.

- **The annual dropout rate** answers the question, "What percentage of students dropped out this year?" Annual rates in this study are reported by grade, for a range of grades (9-12), by gender, by racial/ethnic group and by kind of community. The annual rate in this report is calculated by comparing the number of dropouts to the enrollment on October 1.
- **The projected four-year dropout rate** answers the question, "What percentage of this year's freshman class may not graduate in four years?" It is a prospective estimate based on annual, grade-specific dropout rates. The computation of the statewide projected four-year dropout rate is provided in Appendix B.

# Statewide Results

## Summary of Annual and Projected Four-Year Dropout Rates

Annual dropout rates and four-year dropout rates are shown in Table 1. The annual dropout rate describes the number of 1987-88 dropouts as a percentage of the October 1988 enrollment. The projected four-

year dropout rate estimates the percentage of 1987 freshmen who may not graduate if current annual dropout rates persist over the next three years.

Annual dropout rates and projected four-year dropout rates for individual school districts are provided in Appendix C.

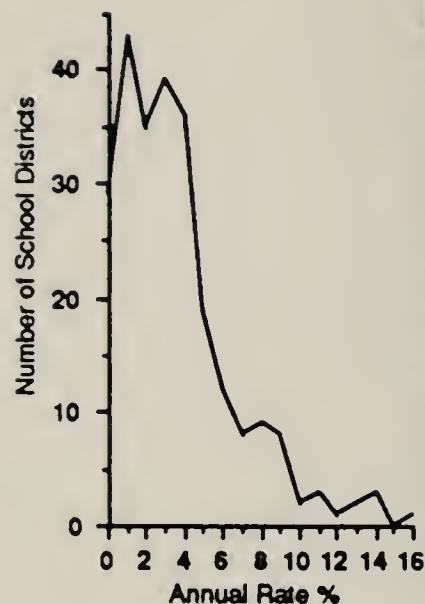
**Table 1**  
**Massachusetts Dropout Data**  
**Annual and Projected Four-Year Dropout Rates**  
**1987-88**

	# Dropouts Gr. 9-12	Enrollment Gr. 9-12	Annual Rate Gr. 9-12	Projected 4-Yr. Rate
<b>Grade</b>				
Grade 9	3,271	64,918	5.0	-
Grade 10	4,230	64,870	6.5	-
Grade 11	4,001	64,930	6.1	-
Grade 12	2,481	63,828	3.8	-
<b>Grades 9-12</b>	<b>13,983</b>	<b>258,546</b>	<b>5.4</b>	<b>20</b>
<b>Gender</b>				
Male	8,093	131,162	6.2	21
Female	5,890	127,384	4.6	18
<b>Race/Ethnic Groups</b>				
Asian	298	6,152	4.8	18
Black	1,808	17,078	10.6	36
Hispanic	1,727	12,017	14.4	45
Native Amer.	54	458	11.8	40
White	10,096	222,841	4.5	17
<b>Kind of Community*</b>				
Urban	9,274	103,712	8.9	31
Dev. Suburbs	1,883	71,880	2.6	10
Growth	1,275	29,378	4.3	16
Resident. Suburbs	358	25,146	1.4	5
Rural Economic	988	22,137	4.4	17
Small Rural	115	3,209	3.5	14
Resort/Retire./Artistic	90	3,084	2.9	11

\*A scheme which classifies Massachusetts cities and towns based on 15 community, social, demographic and economic attributes. For a listing by community, see Appendix D.

## Grades 9-12 Dropouts

Figure 1  
Distribution of Annual  
Dropout Rates  
Grades 9-12



During the 1987-88 reporting period, a total of 258,546 students were enrolled in grades 9-12. Of those students 13,983 dropped out, representing an annual dropout rate of 5.4 percent. This is equivalent to losing the entire student body of ten large high schools.

Annual dropout rates varied widely among school districts ranging from less than one percent to nearly 17 percent. In nearly three-quarters of the districts, annual dropout rates were below the statewide average, and in 18 districts the rates exceeded 10 percent (Figure 1).

The 1987-88 annual dropout rate of 5.4 percent did not change significantly from the previous year when the rate was 5.3 percent (Table 2). The fact that the annual dropout rate in 1987-88 appears to be equivalent to the rate in 1986-87 is consistent with other sources of

data which indicate that Commonwealth's dropout rate has remained relatively constant over the past several years. The "State Education Performance Chart, 1982 and 1988", published by the U.S. Department of Education, shows that the graduation rate for Massachusetts has increased only slightly from 76.4 percent in 1982 to 76.5 percent in 1988.

According to information from the U.S. Department of Education, Massachusetts currently ranks 20th in the number of students who graduate from high school, down from 13th in 1982. Ohio, Connecticut, Pennsylvania, and New Jersey, industrial states that are demographically similar to Massachusetts, graduate a higher proportion of their students, while Indiana, Illinois, New York and Michigan graduate a lower proportion of their students.

Table 2  
Two-Year Comparison of  
Annual Dropout Rates Statewide  
Grades 9-12

	1986-87	1987-88
# Dropouts	14,354	13,983
Enrollment	268,180	258,546
Annual Rate (%)	5.3	5.4

## Grades 6-8 Dropouts

A total of 486 students were reported to have dropped out of grades 6-8. It is likely that this is an undercount because students are categorized as truant because they are not 16 years old (compul-

sory school age). Data is, however, comparable to the previous year's finding when 466 students were reported to have dropped out of grades 6-8.

## Dropouts by Grade

Proportionately more 10th and 11th graders dropped out, at 6.5 and 6.1 percent respectively, than students in any other grade (Figure 2). This is consistent with the fact that students usually reach 16 in grade 10 or 11, and are no longer required by law to attend school. The proportion of 12th graders who dropped out was lowest at 3.8 percent, and moderate for 9th graders at 5.0 percent.

In Massachusetts, the compulsory school age is 16. Therefore, it is reasonable to speculate that 9th grade dropouts, who are at least 16 years old, must have been retained

in grade sometime during their school experience, because most ninth graders are only 14 or 15. This is consistent with current research which indicates that over-aged students are at a higher risk of dropping out than those who are the same age as their classmates.

There was a slight increase in the annual dropout rates in grades 10 and 11 and a small decrease in the rate in grade 12 between 1986-87 and 1987-88 (Table 3). The differences are not large enough to indicate a significant change in the percentage of dropouts in those grades.

Figure 2  
Annual Dropout Rates  
by Grade  
1987-88

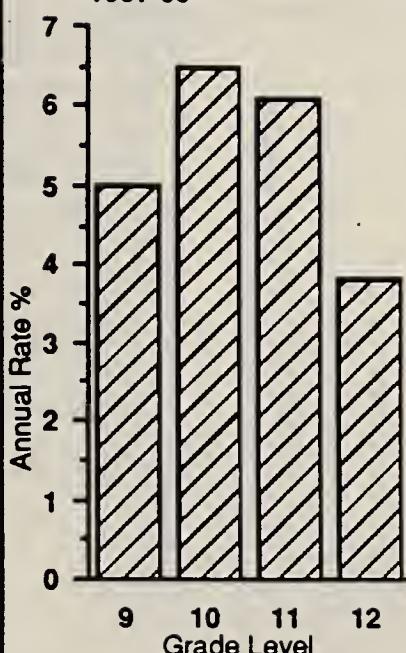


Table 3  
Two-Year Comparison of Annual Dropout Rates  
by Grade

	1986-87			1987-88		
	Enrollment	# Dropouts	Rate(%)	Enrollment	# Dropouts	Rate(%)
Grade 9	68,655	3,541	5.0	64,918	3,271	5.0
Grade 10	69,263	4,258	6.1	64,870	4,230	6.5
Grade 11	67,983	4,053	5.9	64,930	4,001	6.1
Grade 12	62,279	2,592	4.1	63,828	2,481	3.8

## Dropouts by Gender

The annual dropout rate (grades 9-12) for males was moderately higher than the rate for females. A total of 8,093 males dropped out, representing a rate of 6.5 percent. In contrast, 5,890 females dropped out at a rate of 4.6 percent.

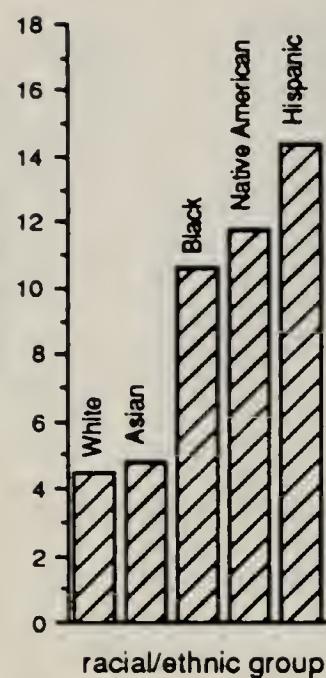
These figures are similar to 1986-87 dropout data which also indicated that a greater proportion of males than females dropped out of school (Table 4). Again, differences in the rates between the two years are not large enough to indicate any significant changes.

Table 4  
Two-Year Comparison of Annual Dropout Rates  
by Gender

	1986-87			1987-88		
	Enrollment	# Dropouts	Rate(%)	Enrollment	# Dropouts	Rate(%)
Males	135,183	7,845	5.8	131,162	8,093	6.2
Females	132,997	6,509	4.8	127,384	5,890	4.6

## Dropouts by Racial/Ethnic Group

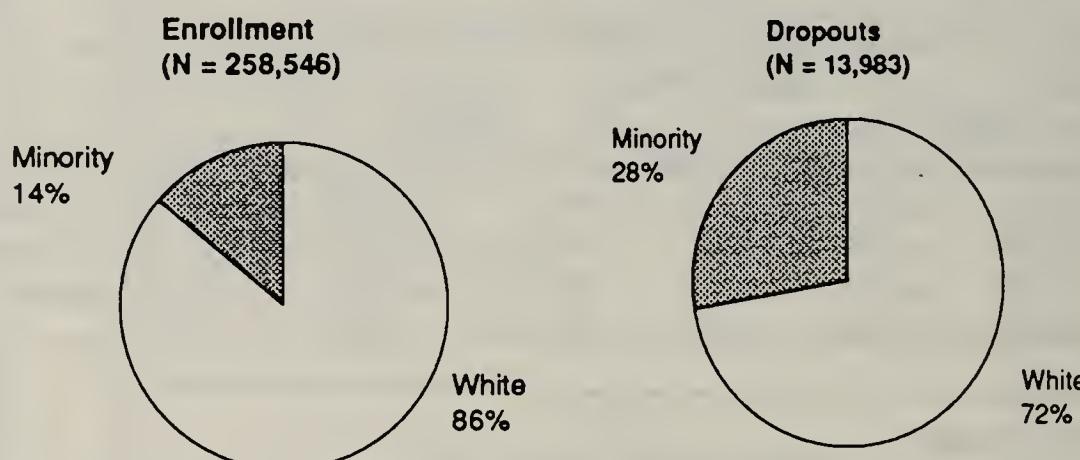
**Figure 3**  
Annual Dropout Rates  
Grades 9-12  
by Racial/Ethnic Group  
1987-88



There were large differences in annual dropout rates (grades 9-12) among the various racial/ethnic groups that constitute the state's student population (Figure 3). The proportion of Hispanic students who dropped out at 14.4 percent was highest. Native American students dropped out at a rate of 11.8 percent, Black students at a rate of 10.6 percent, and Asian students at 4.8 percent. The proportion of White students who dropped out was lowest at 4.5 percent.

Because racial/ethnic minorities had higher than average dropout rates, they were overrepresented in the total pool of dropouts. Racial/ethnic minorities constituted about 14 percent of the total number of students in grades 9-12, but they accounted for 28 percent of the total number of students reported to have dropped out. White students accounted for 72 percent of all dropouts.

**Figure 4**  
Total Enrollment/Total Dropouts  
Minority and White  
Grades 9-12, 1987-88



Compared to the previous year's figures (Table 5), annual dropout rates decreased slightly among Hispanic, Black and Asian stu-

dents, and increased slightly among Native American and White students. However, changes are small and may be due to reporting error.

**Table 5**  
Two-Year Comparison of Annual Dropout Rates  
by Racial/Ethnic Group

	1986-87			1987-88		
	Enrollment #	Dropouts	Rate(%)	Enrollment	# Dropouts	Rate(%)
Asian	5,190	331	6.3	6,152	298	4.8
Black	17,153	1,826	10.6	17,078	1,808	10.6
Hispanic	10,671	1,631	15.2	12,017	1,727	14.4
Native Am.	387	36	9.3	458	54	11.8
White	234,779	10,530	4.4	222,841	10,096	4.5

# Dropouts by Kind of Community

Eleven percent of Massachusetts public school students live in poverty, and for ten percent their primary language is not English. In the Commonwealth's urban areas these proportions are 22 and 20 percent respectively. Therefore, since poverty and limited proficiency in English are frequently factors that place students at risk of dropping out, it follows that the annual dropout rate in the Commonwealth's urban areas was 8.9 percent - highest among the various kinds of communities in the state (Figure 6).

The annual dropout rate was lowest in residential suburbs at 1.4 percent, followed by resort/artistic/retirement areas at 2.9 percent, developed suburbs at 2.6 percent, and small rural communities at 3.5 percent. Growth communities and rural economic centers reported moderate dropout rates at 4.3 and 4.4 percent respectively. Urban students were overrepresented in the total pool of dropouts. Urban students constituted about 40 percent of the total number of students in grades 9-12, but accounted for 66 percent of the total number of students reported to have dropped out (Figure 6).

Figure 5  
Annual Dropout Rates  
Grades 9-12  
by Kind of Community  
1987-88

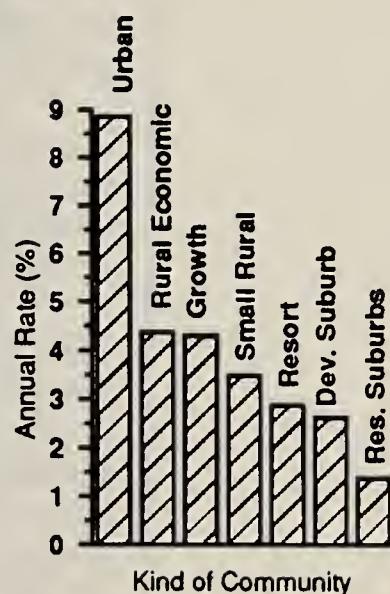
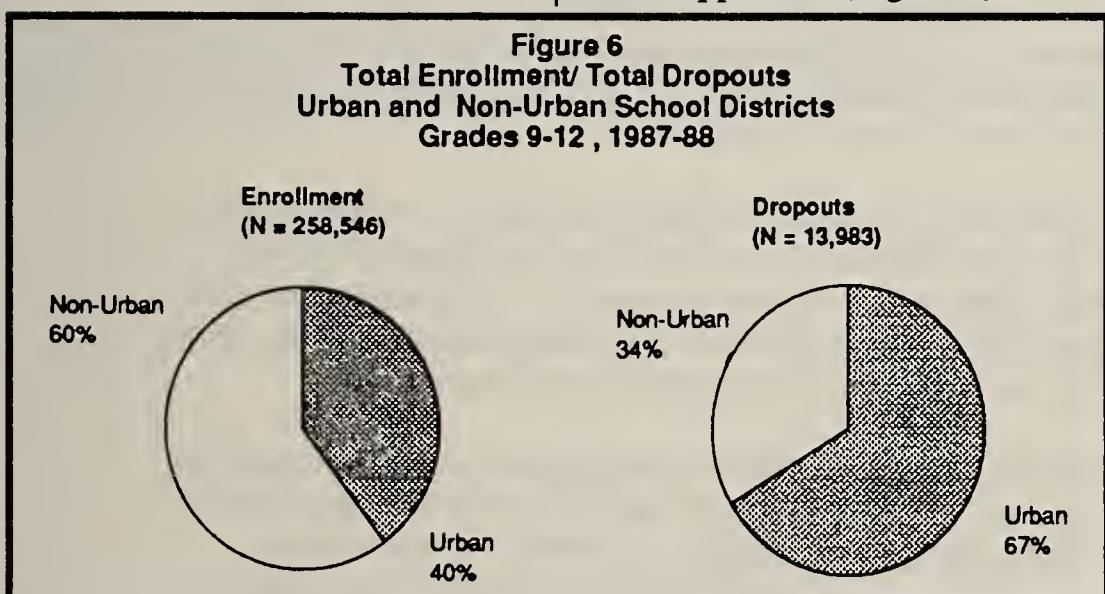


Figure 6  
Total Enrollment/ Total Dropouts  
Urban and Non-Urban School Districts  
Grades 9-12, 1987-88



Compared to the previous reporting period, annual dropout rates for the various kinds of communities

remained relatively the same in 1987-88, except for an apparent slight decrease in the dropout rate in small rural areas (Table 6).

Table 6  
Two-Year Comparison of Annual Dropout Rates  
by Kind of Community

	1986-87			1987-88		
	Enrollment #	Dropouts	Rate(%)	Enrollment #	Dropouts	Rate(%)
Urban	107,052	9,569	8.9	103,712	9,274	8.9
Dev. Suburbs	74,428	1,883	2.5	71,880	1,883	2.6
Growth	31,184	1,310	4.2	29,378	1,275	4.3
Res. Suburbs	25,721	401	1.5	25,146	358	1.4
Rural Economic	23,332	959	4.1	22,137	988	4.4
Small Rural	3,344	144	4.3	3,209	115	3.5
Resort	3,119	88	2.8	3,084	90	2.9

## Conclusion

This report has presented the scope of the dropout problem in Massachusetts for 1987-88. Statewide data indicates that one in twenty high school students dropped out of school during that period, equivalent to the previous year's rate. Figures showed that two-thirds of the dropouts attended schools in urban areas, and while racial/ethnic minorities dropped out at higher rates than White students, nearly three-quarters of the dropouts were White.

In response to the growing concern about the number of students leaving school before graduating, the Massachusetts legislature has established two programs to help schools and communities develop strategies to help students stay in school.

The Chapter 188 Dropout Prevention Program, established by the School Improvement Act of 1985, provides discretionary grant funds to school districts that have high percentages of low-income students and school dropouts. In Fiscal Year 1989, grants totalling \$2.25 million were distributed to 40 school districts. The dropout prevention programs in those systems served over 6,000 students in grades 7-9, reflecting an emphasis on the need to focus dropout prevention efforts in the years before high school.

In Fiscal 1990, the Department of Education will be shifting the focus of the Chapter 188 Dropout Prevention Program to require "a systemic change approach to dropout prevention." This will require all funded schools to undergo a process of restructuring traditional forms of school governance, policies, programs and practices.

Commonwealth Futures is another state program which addresses the needs of students at risk of dropping out. Currently serving 13 communities, Futures programs promote collaborations among state agencies, community-based organizations, municipal governments, and school systems to develop and implement a comprehensive approach to dropout prevention. At the state level, Commonwealth Futures is governed by a steering committee comprised of the Governor's Education Advisor, the Commissioner of Education, the Secretaries of Human Services, Economic Affairs and Community Development, and the Director of the Department of Employment and Training.

It is hoped that the data provided in this report will be valuable to anyone concerned with school dropouts. You are encouraged to use the figures provided here to design strategies to ensure that every student in the Commonwealth receives a high school education.

## Appendix A

### Sources of Data

Dropout and enrollment data provided in this report were submitted by individual school to the Massachusetts Department of Education in the following instruments:

*Chapter 188 Individual School Report, 1987-88, Massachusetts*

*Department of Education*

Schools submit this report to the Department on an annual basis at the end of July. It covers the period July 1 to June 31, and requests data on the number of suspensions and expulsions as well as the number of dropouts. Information on the number of truants, certain attendance information and the future plans of high school graduates is also requested. Wherever appropriate, data are broken down by grade, gender and race.

*Individual School Report, October 1988*

Schools submit this report to the Department on an annual basis during the fall. It provides the enrollment on October 1 by grade, gender, race, language and residency subgroups.

## Appendix B

### Calculation of Projected Four-Year Dropout Rate

The projected four-year dropout rate estimates the proportion of grade 9 students likely to drop out before graduating. The major assumption in the methodology used to make the projection is that annual dropout rates for grades 10, 11 and 12 will remain reasonably constant over the following three years.

To illustrate the methodology, the computation of the projected four-year dropout rate for students who entered grade 9 in 1987 (Class of 1991) is shown in steps 1 - 6 below.

- 1. Actual number of students who dropped out of grade 9 in 1987-88:*

$$64,918 \text{ (actual 1987-88 grade 9 enrollment)} \times 5.0\% \text{ (actual grade 9 annual dropout rate)} = 3,271$$

- 2. Projected number of students who may drop out of grade 10 in 1988-89:*

$$64,918 - 3,271 \text{ (grade 9 dropouts)} = 61,647 \text{ (projected 1988-89 grade 10 enrollment)}$$

$$61,647 \times 6.5\% \text{ (1987-88 grade 10 annual dropout rate)} = 4,007$$

- 3. Projected number of students who may drop out of grade 11 in 1989-90:*

$$61,647 - 4,007 \text{ (projected number of grade 10 dropouts)} = 57,640 \text{ (projected 1989-90 grade 11 enrollment)}$$

$$57,640 \times 6.1\% \text{ (1987-88 grade 11 annual dropout rate)} = 3,516$$

- 4. Projected number of students who may drop out of grade 12 in 1990-91:*

$$57,640 - 3,516 \text{ (projected number of grade 11 dropouts)} = 54,124 \text{ (projected 1990-91 grade 12 enrollment)}$$

$$54,124 \times 3.8\% \text{ (1987-88 grade 12 annual dropout rate)} = 2,057$$

- 5. Total number of students who may drop out between 1987 and 1991 (sum of 1-4):* 12,851

- 6. Projected fouryear dropout rate for Class of 1991:*

$$\frac{12,851 \text{ (1987-91 dropouts)}}{64,918 \text{ (1987-88 grade 9 enrollment)}} \times 100 = 20\%$$

**Appendix C**  
**Massachusetts Dropout Data**  
**By School District**

School District	1986-87						1987-88					
	Number	Oct-87	Annual	Proj. 4YR	Dropout	Dropout	Number	Oct-88	Annual	Proj. 4YR	Dropout	Dropout
Dropouts	Enrollment	Dropout	Dropout	Rate(%)	Rate(%)	Dropouts	Enrollment	Dropout	Dropout	Rate(%)	Rate(%)	Rate(%)
Grades 9-12	Grades 9-12	Grades 9-12	Grades 9-12	Grades 9-12	Grades 9-12	Grades 9-12	Grades 9-12	Grades 9-12	Grades 9-12	Grades 9-12	Grades 9-12	Grades 9-12
ABINGTON	18	678	2.6	10	15	616	2.4	9	2.4	9	2.4	9
AGAWAM	58	1,466	3.9	15	82	1,391	5.9	21	5.9	21	5.9	21
AMESBURY	39	705	5.5	20	22	640	3.4	13	3.4	13	3.4	13
ANDOVER	17	1,471	1.1	4	18	1,380	1.3	5	1.3	5	1.3	5
ARLINGTON	33	1,436	2.3	9	37	1,334	2.7	10	2.7	10	2.7	10
ASHLAND	6	427	1.4	6	5	400	1.2	5	1.2	5	1.2	5
ATTLEBORO	144	1,766	8.1	29	155	1,673	9.2	32	9.2	32	9.2	32
AUBURN	9	648	1.3	5	17	623	2.7	10	2.7	10	2.7	10
AVON	3	173	1.7	6	4	163	2.4	8	2.4	8	2.4	8
AYER	35	628	5.5	21	28	632	4.4	17	4.4	17	4.4	17
BARNSTABLE	70	1,625	4.3	16	75	1,536	4.8	18	4.8	18	4.8	18
BEDFORD	8	750	1.0	4	9	737	1.2	5	1.2	5	1.2	5
BELCHERTOWN	20	429	4.6	21	20	394	5.0	19	5.0	19	5.0	19
BELLINGHAM	18	789	2.2	9	28	745	3.7	14	3.7	14	3.7	14
BELMONT	18	1,024	1.7	7	7	968	0.7	3	0.7	3	0.7	3
BEVERLY	31	1,510	2.0	8	35	1,394	2.5	10	2.5	10	2.5	10
BILLERICA	117	1,885	6.2	22	80	1,771	4.5	17	4.5	17	4.5	17
BOSTON	2,513	17,358	14.4	46	2,237	16,884	13.3	43	13.3	43	13.3	43
BOURNE	38	693	5.4	20	21	638	3.2	12	3.2	12	3.2	12
BRAINTREE	47	1,550	3.0	11	51	1,414	3.6	13	3.6	13	3.6	13
BROCKTON	351	4,234	8.2	28	379	3,901	9.7	33	9.7	33	9.7	33
BURLINGTON	23	1,281	1.8	7	14	1,207	1.1	4	1.1	4	1.1	4
CAMBRIDGE	158	2,541	6.2	22	146	2,400	6.0	22	6.0	22	6.0	22
CANTON	11	868	1.2	5	11	774	1.4	5	1.4	5	1.4	5
CHATHAM	4	172	2.3	10	2	174	1.1	4	1.1	4	1.1	4

Because 1987-88 dropout data are generally more accurate than the previous year's data, comparisons between the two years may be unreliable in some cases.

Appendix C  
**Massachusetts Dropout Data**  
**By School District**

School	District	1986-87						1987-88					
		Number Dropouts	Oct-87 Enrollment Grades 9-12	Annual Dropout Rate(%)	Proj. 4YR Dropout Rate(%)	Number Dropouts	Oct-88 Enrollment Grades 9-12	Annual Dropout Rate(%)	Proj. 4YR Dropout Rate(%)	Number Dropouts	Oct-88 Enrollment Grades 9-12	Annual Dropout Rate(%)	Proj. 4YR Dropout Rate(%)
CHELMSFORD		38	2,073	1.8	7					42	1,880	2.2	8
CHELSEA		156	910	17.1	52					143	860	16.6	51
CHICOPEE		167	2,362	7.0	25					188	2,368	7.9	28
CLINTON		38	530	7.1	26					27	492	5.4	20
COHASSET		11	418	2.6	9					3	397	0.7	3
DANVERS		24	1,019	2.3	9					24	938	2.5	10
DARTMOUTH		46	1,149	4.0	15					42	1,118	3.7	14
DEDHAM		27	1,029	2.6	10					24	896	2.6	10
DOUGLAS		13	197	6.6	22					7	205	3.4	14
DRACUT		28	1,056	2.6	10					30	1,014	2.9	11
DUXBURY		18	1,035	1.7	6					2	968	0.2	1
EAST BRIDGEWATER		15	670	2.2	8					25	643	3.8	15
EASTHAMPTON		41	632	6.4	23					53	550	9.6	33
EAST LONGMEADOW		25	784	3.1	12					18	718	2.5	10
EASTON		12	1,054	1.1	4					15	999	1.5	5
EVERETT		111	1,417	7.8	27					44	1,285	3.4	13
FAIRHAVEN		28	670	4.1	15					33	620	5.3	19
FALL RIVER		328	2,999	10.9	36					329	2,968	11.0	37
FALMOUTH		49	1,464	3.3	12					68	1,441	4.7	17
FITCHBURG		146	993	14.7	44					91	994	9.1	31
FOXBOROUGH		28	918	3.0	12					32	869	3.6	13
FRAMINGHAM		93	2,337	3.9	15					85	2,208	3.8	14
FRANKLIN		18	914	1.9	7					43	909	4.7	18
GARDNER		41	693	5.9	21					35	691	5.0	19
GEORGETOWN		-	-	-	-					2	305	0.6	3

Because 1987-88 dropout data are generally more accurate than the previous year's data, comparisons between the two years may be unreliable in some cases.

**Appendix C**  
**Massachusetts Dropout Data**  
**By School District**

School District	1986-87						1987-88					
	Number Dropouts Grades 9-12	Oct-87 Enrollment Grades 9-12	Annual Dropout Rate(%)	Proj. 4YR Dropout Rate(%)	Number Dropouts Grades 9-12	Oct-88 Enrollment Grades 9-12	Annual Dropout Rate(%)	Proj. 4YR Dropout Rate(%)				
GLOUCESTER	106	1,226	8.6	30	103	1,120	9.2	30				
GRAFTON	22	512	4.3	16	22	482	4.5	17				
GRANBY	7	278	2.5	11	9	262	3.4	12				
GREENFIELD	53	736	7.2	26	60	729	8.2	29				
HADLEY	-	-	-	-	2	128	1.5	7				
HANOVER	15	742	2.0	8	5	707	0.7	2				
HARVARD	1	322	0.3	1	3	285	1.0	3				
HARWICH	6	437	1.3	5	9	401	2.2	8				
HATFIELD	-	-	-	-	0	163	0.0	0				
HAVERHILL	84	1,610	5.2	19	115	1,538	7.4	27				
HINGHAM	13	1,234	1.0	4	13	1,133	1.1	4				
HOLBROOK	19	380	5.0	19	17	375	4.5	18				
HOLLISTON	12	836	1.4	6	7	787	0.8	3				
HOLYOKE	165	1,966	8.3	30	184	1,834	10.0	35				
HOPEDALE	2	234	0.8	4	3	220	1.3	6				
HOPKINTON	10	367	2.7	10	4	360	1.1	4				
HUDSON	17	592	2.8	11	19	603	3.1	12				
HULL	40	564	7.0	25	27	521	5.1	19				
IPSWICH	14	500	2.8	10	17	464	3.6	13				
LAWRENCE	273	1,874	14.5	45	299	2,009	14.8	46				
LEE	2	393	0.5	2	8	395	2.0	8				
LEICESTER	16	435	3.6	14	10	411	2.4	9				
LENOX	3	218	1.3	5	9	212	4.2	16				
LEOMINSTER	74	1,573	4.7	17	102	1,494	6.8	25				
LEXINGTON	16	1,765	0.9	3	10	1,576	0.6	2				

Because 1987-88 dropout data are generally more accurate than the previous year's data, comparisons between the two years may be unreliable in some cases.

**Appendix C**  
**Massachusetts Dropout Data**  
**By School District**

School District	1986-87						1987-88					
	Number Dropouts Grades 9-12	Oct-87 Enrollment Grades 9-12	Annual Dropout Rate(%)	Proj. 4YR Dropout Rate(%)	Number Dropouts Grades 9-12	Oct-88 Enrollment Grades 9-12	Annual Dropout Rate(%)	Proj. 4YR Dropout Rate(%)				
LITTLETON	10	331	3.0	11	5	323	1.5	6				
LONGMEADOW	13	1,025	1.2	5	5	974	0.5	2				
LOWELL	371	2,716	13.6	43	385	2,718	14.1	50				
LUDLOW	29	979	2.9	11	22	896	2.4	8				
LUNENBURG	12	525	2.2	9	9	471	1.9	7				
LYNN	274	3,121	8.7	30	249	2,960	8.4	29				
LYNNFIELD	7	684	1.0	3	8	612	1.3	5				
MALDEN	117	1,745	6.7	24	135	1,603	8.4	31				
MANCHESTER	—	—	—	—	3	223	1.3	5				
MANSFIELD	33	765	4.3	15	24	692	3.4	13				
MARBLEHEAD	9	954	0.9	3	6	826	0.7	3				
MARLBOROUGH	58	1,099	5.2	19	60	986	6.0	22				
MARSHFIELD	34	1,415	2.4	9	23	1,306	1.7	6				
MAYNARD	7	377	1.8	7	13	348	3.7	13				
MEDFIELD	6	605	0.9	4	1	559	0.1	0				
MEDFORD	98	2,017	4.8	17	102	1,850	5.5	20				
MEDWAY	5	574	0.8	3	7	569	1.2	4				
MELROSE	14	1,404	1.0	4	23	1,312	1.7	6				
METHUEN	116	1,478	7.8	28	90	1,445	6.2	23				
MIDDLEBOROUGH	39	1,037	3.7	14	39	1,010	3.8	14				
MILFORD	55	1,286	4.2	16	39	1,271	3.0	12				
MILLBURY	14	480	2.9	11	20	449	4.4	17				
MILLIS	5	320	1.5	6	5	301	1.6	7				
MILTON	17	902	1.8	7	4	814	0.4	2				
MONSON	4	286	1.4	5	11	272	4.0	16				

Because 1987-88 dropout data are generally more accurate than the previous year's data, comparisons between the two years may be unreliable in some cases.

**Appendix C**  
**Massachusetts Dropout Data**  
**By School District**

School District	Number	1986-87			1987-88				
		Dropouts	Enrollment	Proj. 4YR Dropout Rate(%)	Oct-88	Annual Dropout Rate(%)	Oct-88 Enrollment	Proj. 4YR Dropout Rate(%)	
	Grades 9-12	Grades 9-12	Rate(%)	Grades 9-12	Rate(%)	Grades 9-12	Rate(%)	Grades 9-12	Rate(%)
NANTUCKET	7	229	3.0	12	—	—	—	—	—
NATICK	25	1,420	1.7	7	37	1,285	2.8	11	11
NEEDHAM	14	1,292	1.0	4	7	1,224	0.5	2	2
NEW BEDFORD	296	3,206	9.2	31	306	3,156	9.7	32	32
NEWBURYPORT	22	836	2.6	10	35	800	4.3	16	16
NEWTON	126	3,391	3.7	14	90	3,090	2.9	11	11
NORTH ADAMS	66	693	9.5	32	58	681	8.5	30	30
NORTHAMPTON	52	1,066	4.8	18	50	1,008	4.9	18	18
NORTH ANDOVER	15	1,083	1.3	6	22	1,030	2.1	8	8
NORTH ATTLEBOROUGH	35	1,013	3.4	13	26	945	2.7	11	11
NORTHBRIDGE	36	562	6.4	23	31	554	5.6	21	21
NORTH BROOKFIELD	12	238	5.0	19	12	216	5.5	20	20
NORTH READING	12	637	1.8	7	15	631	2.3	8	8
NORTON	38	648	5.8	21	31	614	5.0	18	18
NORWELL	—	—	—	—	8	646	1.2	5	5
NORWOOD	34	1,195	2.8	10	32	1,088	2.9	11	11
OXFORD	20	578	3.4	13	27	532	5.0	19	19
PALMER	13	451	2.8	11	11	414	2.6	10	10
PEABODY	98	2,036	4.8	18	104	1,931	5.3	20	20
PITTSFIELD	177	2,664	6.6	24	130	2,450	5.3	19	19
PROVINCETOWN	2	139	1.4	5	4	141	2.8	11	11
QUINCY	171	3,006	5.6	21	135	2,731	4.9	18	18
RANDOLPH	45	1,309	3.4	13	54	1,230	4.3	17	17
READING	48	1,301	3.6	14	22	1,182	1.8	7	7
REVERE	55	1,303	4.2	16	71	1,213	5.8	22	22

Because 1987-88 dropout data are generally more accurate than the previous year's data, comparisons between the two years may be unreliable in some cases.

**Appendix C**  
**Massachusetts Dropout Data**  
**By School District**

School District	1986-87						1987-88					
	Number Dropouts Grades 9-12	Oct-87 Enrollment Grades 9-12	Annual Dropout Rate(%)	Proj. 4YR Dropout Rate(%)	Number Dropouts Grades 9-12	Oct-88 Enrollment Grades 9-12	Annual Dropout Rate(%)	Proj. 4YR Dropout Rate(%)				
ROCKLAND	26	824	3.1	12	44	798	5.5	20				
ROCKPORT	12	302	3.9	16	11	284	3.8	15				
SALEM	106	1,185	8.9	30	97	1,136	8.5	28				
SANDWICH	8	738	1.0	4	9	722	1.2	5				
SAUGUS	29	1,163	2.4	9	11	1,005	1.0	4				
SCITUATE	9	913	0.9	4	13	843	1.5	6				
SEEKONK	11	806	1.3	5	22	728	3.0	11				
SHARON	8	854	0.9	4	8	805	0.9	4				
SHREWSBURY	44	1,038	4.2	15	42	992	4.2	15				
SOMERSET	24	1,197	2.0	8	24	1,157	2.0	8				
SOMERVILLE	198	2,245	8.8	31	189	2,089	9.0	31				
SOUTHBRIDGE	57	668	8.5	28	55	640	8.5	30				
SOUTH HADLEY	18	691	2.6	10	19	639	2.9	11				
SPRINGFIELD	662	6,059	10.9	36	798	5,832	13.6	43				
STONEHAM	22	894	2.4	9	26	827	3.1	12				
STOUGHTON	48	1,331	3.6	13	56	1,306	4.2	16				
SUTTON	12	255	4.7	18	10	240	4.1	17				
SWAMPSMOTT	12	834	1.4	5	13	774	1.6	6				
SWANSEA	49	933	5.2	19	35	880	3.9	15				
TAUNTON	143	1,577	9.0	31	177	1,462	12.1	39				
TEWKSBURY	45	1,173	3.8	14	29	1,091	2.6	10				
TYNGSBOROUGH	5	325	1.5	6	5	318	1.5	6				
UXBRIDGE	24	417	5.7	22	29	393	7.3	28				
WAKEFIELD	1	1,166	0.0	0	12	1,084	1.1	4				
WALPOLE	7	949	0.7	3	11	861	1.2	5				

Because 1987-88 dropout data are generally more accurate than the previous year's data, comparisons between the two years may be unreliable in some cases.

Appendix C  
 Massachusetts Dropout Data  
 By School District

School District	Number	1986-87			1987-88			Number	Oct-88	Annual	Proj. 4YR	
		Dropouts Grades 9-12	Enrollment Grades 9-12	Dropout Rate(%)	Dropout Rate(%)	Dropouts Grades 9-12	Enrollment Grades 9-12	Dropout Rate(%)				
WALTHAM	102	2,046	4.9	18	103	1,916	5.3	20				
WARE	24	454	5.2	20	27	432	6.2	23				
WAREHAM	71	695	10.2	35	29	684	4.2	16				
WATERTOWN	35	934	3.7	13	39	875	4.4	17				
WAYLAND	4	749	0.5	2	5	705	0.7	2				
WEBSTER	7	655	1.0	4	14	610	2.3	8				
WELLESLEY	7	1,075	0.6	2	9	986	0.9	3				
WESTBOROUGH	5	654	0.7	3	4	635	0.6	2				
WEST BOYLSTON	-	-	-	-	1	266	0.3	2				
WEST BRIDGEWATER	8	347	2.3	9	9	334	2.6	11				
WESTFIELD	85	1,890	4.5	17	83	1,840	4.5	16				
WESTFORD	19	907	2.0	8	21	872	2.4	9				
WESTON	3	596	0.5	2	3	536	0.5	2				
WESTPORT	30	584	5.1	19	25	533	4.6	18				
WEST SPRINGFIELD	94	1,171	8.0	28	-	-	-	-				
WESTWOOD	7	766	0.9	3	6	685	0.8	4				
WEYMOUTH	98	2,698	3.6	14	79	2,472	3.2	12				
WILMINGTON	18	917	1.9	7	20	805	2.4	9				
WINCHENDON	14	321	4.3	16	15	313	4.7	18				
WINCHESTER	16	1,081	1.4	5	23	1,007	2.2	8				
WINTHROP	13	737	1.7	7	10	719	1.3	5				
WOBURN	26	1,552	1.6	6	29	1,462	1.9	8				
WORCESTER	555	4,703	11.8	39	539	4,647	11.6	39				

Because 1987-88 dropout data are generally more accurate than the previous year's data, comparisons between the two years may be unreliable in some cases.

Appendix C  
 Massachusetts Dropout Data  
 By School District

School District	1986-87			1987-88				
	Number Dropouts Grades 9-12	Oct-87 Enrollment Grades 9-12	Annual Dropout Rate(%)	Proj. 4YR Dropout Rate(%)	Number Dropouts Grades 9-12	Oct-88 Enrollment Grades 9-12	Annual Dropout Rate(%)	Proj. 4YR Dropout Rate(%)
<b>INDEPENDENT VOCATIONAL SCHOOLS</b>								
NORTHAMPTON SMITH	20	586	3.4	1.3	20	564	3.5	14
WORCESTER TRADE	36	1,251	2.8	1.1	50	1,166	4.2	16
<b>REGIONAL ACADEMIC DISTRICTS</b>								
ACTON BOXBOROUGH	10	1,474	0.6	2	14	1,324	1.0	4
ADAMS CHESHIRE	31	585	5.3	1.9	10	538	1.8	7
AMHERST PELHAM	22	1,243	1.7	6	36	1,158	3.1	11
ASHBURNHAM WEST	21	618	3.4	1.3	12	629	1.9	8
ATHOL ROYALSTON	38	597	6.3	2.3	41	561	7.3	26
BERKSHIRE HILLS	18	576	3.1	1.2	25	582	4.3	16
BERLIN BOYLSTON	3	219	1.3	5	1	210	0.4	2
BLACKSTONE MILLVILLE	14	448	3.1	1.2	23	459	5.0	18
BRIDGEWATER RAYNHAM	52	1,307	3.9	1.5	53	1,286	4.1	16
CENTRAL BERKSHIRE	10	730	1.3	5	24	709	3.3	13
CONCORD CARLISLE	16	1,128	1.4	5	18	1,006	1.7	6
DENNIS YARMOUTH	84	1,266	6.6	24	72	1,192	6.0	22
DIGTON REHOBOTH	31	910	3.4	1.3	30	844	3.5	13
DOVER SHERBORN	6	497	1.2	4	3	464	0.6	2
DUDLEY CHARLTON	31	783	3.9	1.5	23	751	3.0	12
NAUSET	31	743	4.1	1.5	22	727	3.0	12
FREETOWN LAKEVILLE	34	926	3.6	1.4	44	891	4.9	19
FRONTIER	7	347	2.0	8	5	322	1.5	7
GATEWAY	17	425	4.0	1.5	27	424	6.3	23
GROTON DUNSTABLE	5	442	1.1	4	2	410	0.4	2

Because 1987-88 dropout data are generally more accurate than the previous year's data, comparisons between the two years may be unreliable in some cases.

Appendix C  
 Massachusetts Dropout Data  
 By School District

School District	Number	1986-87			1987-88			Number	Oct-88	Annual	Proj. 4YR	
		Dropouts	Enrollment	Oct-87	Annual	Proj. 4YR	Dropout	Dropout	Grades 9-12	Rate(%)	Grades 9-12	Rate(%)
		Grades 9-12	Grades 9-12	Rate(%)	Grades 9-12	Rate(%)	Grades 9-12	Rate(%)	Grades 9-12	Rate(%)	Grades 9-12	Rate(%)
GILL MONTAGUE	21	432	4,820	4.8	19	19	31	435	7.1	26	7.1	26
HAMILTON WENHAM	3	765	7,650	0.3	1	1	3	676	0.4	1	0.4	1
HAMPTON WILBRAHAM	30	1,092	10,920	2.7	10	10	30	995	3.0	11	3.0	11
HAMPSHIRE	13	494	4,940	2.6	10	10	6	461	1.3	5	1.3	5
KING PHILIP	29	1,067	10,670	2.7	10	10	33	1,007	3.2	12	3.2	12
LINCOLN-SUDSBURY	10	1,260	12,600	0.7	3	3	—	—	—	—	—	—
MARTHAS VINEYARD	11	482	4,820	2.2	9	9	19	474	4.0	15	4.0	15
MASCONOMET	15	935	9,350	1.6	6	6	19	862	2.2	8	2.2	8
MENDON UPTON	10	343	3,430	2.9	11	11	3	319	0.9	4	0.9	4
MOUNT GREYLOCK	9	549	5,490	1.6	6	6	9	561	1.6	6	1.6	6
MOHAWK TRAIL	8	493	4,930	1.6	6	6	30	527	5.6	21	5.6	21
NARRAGANSETT	20	426	4,260	4.6	17	17	14	427	3.2	12	3.2	12
NASHOBA	13	791	7,910	1.6	6	6	13	756	1.7	6	1.7	6
NORTHBORO SOUTHBOROUGH	31	936	9,360	3.3	12	12	36	928	3.8	14	3.8	14
NORTH MIDDLESEX	58	1,063	10,630	5.4	20	20	35	1,035	3.3	13	3.3	13
OLD ROCHESTER	16	640	6,400	2.5	10	10	11	599	1.8	7	1.8	7
PENTUCKET	11	635	6,350	1.7	7	7	14	618	2.2	9	2.2	9
PIONEER	—	—	—	—	—	—	10	227	4.4	16	4.4	16
PLYMOUTH CARVER	105	2,451	2,451	4.2	16	16	103	2,094	4.9	18	4.9	18
QUABBIN	27	551	551	4.9	18	18	23	537	4.2	16	4.2	16
RALPH C MAHAR	35	554	554	6.3	24	24	32	505	6.3	23	6.3	23
SILVER LAKE	88	1,855	1,855	4.7	17	17	73	1,825	4.0	15	4.0	15
SOUTHERN BERKSHIRE	—	—	—	—	—	—	8	272	2.9	11	2.9	11
SOUTHWICK-TOLLAND	20	503	503	3.9	15	15	39	449	8.6	31	8.6	31
SPENCER E BROOKFIELD	37	649	649	5.7	20	20	32	608	5.2	19	5.2	19

Because 1987-88 dropout data are generally more accurate than the previous year's data, comparisons between the two years may be unreliable in some cases.

Appendix C  
**Massachusetts Dropout Data**  
 By School District

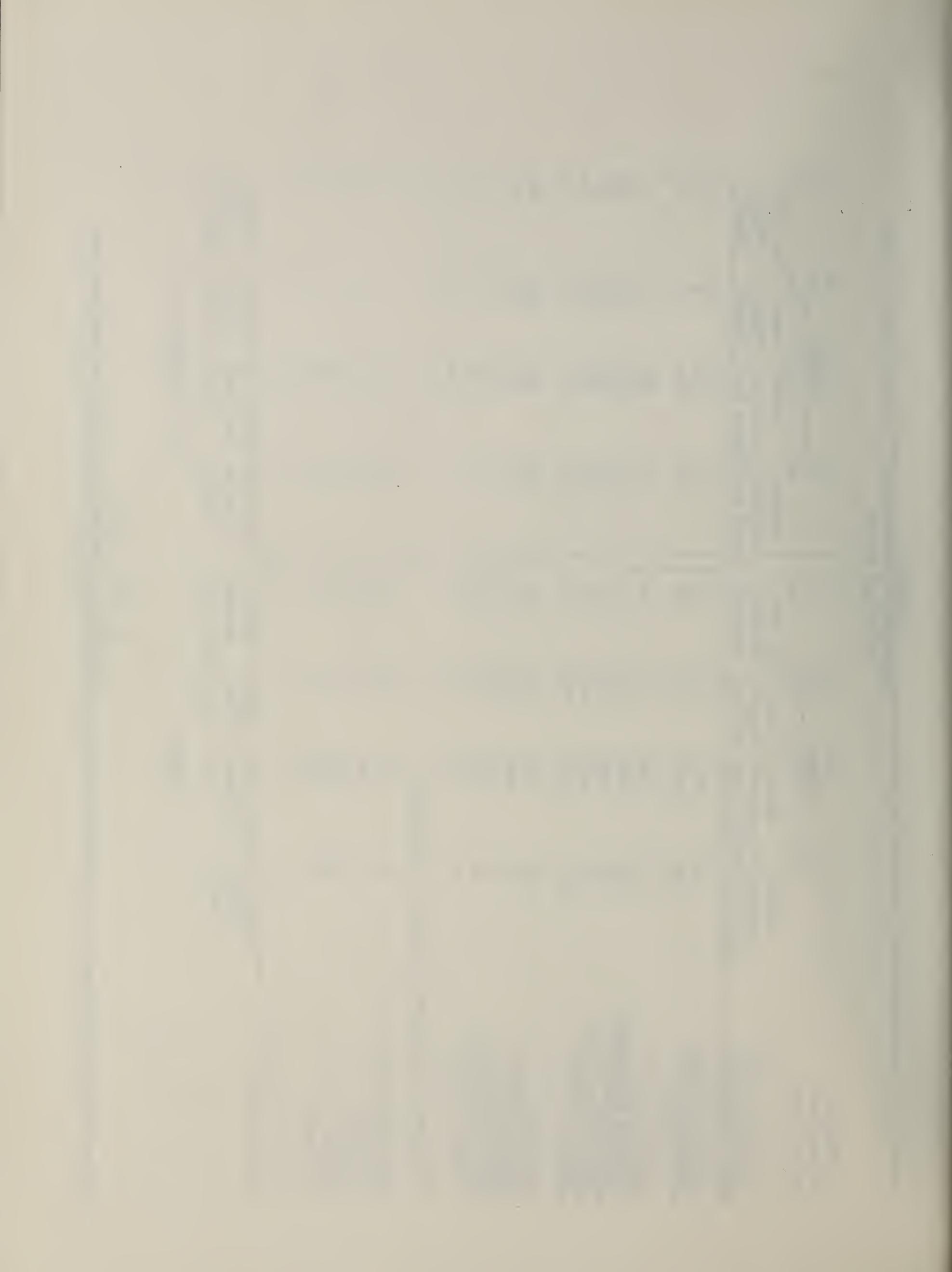
School District	1986-87						1987-88					
	Number Dropouts Grades 9-12	Oct-87 Enrollment Grades 9-12	Annual Dropout Rate(%)	Proj. 4YR Dropout Rate(%)	Number Dropouts Grades 9-12	Oct-88 Enrollment Grades 9-12	Annual Dropout Rate(%)	Proj. 4YR Dropout Rate(%)				
TANTASQUA	49	852	5.7	21	60	887	6.7	24				
TRITON	28	835	3.3	13	29	783	3.7	14				
WACHUSSETT	42	1,701	2.4	9	52	1,649	3.1	11				
QUABOAG	17	361	4.7	17	16	332	4.8	18				
WHITMAN HANSON	64	1,262	5.0	19	66	1,152	5.7	21				
REGIONAL VOCATIONAL-TECHNICAL DISTRICTS												
ASSABET VALLEY	46	1,167	3.9	15	3	1,073	0.2	1				
BLACKSTONE VALLEY	39	911	4.2	16	32	856	3.7	14				
BLUE HILLS	2	900	0.2	1	—	—	—	—				
BRISTOL PLYMOUTH	6	774	0.7	3	5	749	0.6	3				
CAPE COD	105	777	13.5	44	66	654	10.0	35				
FRANKLIN COUNTY	65	612	10.6	37	65	561	11.5	39				
GREATER FALL RIVER	71	1,029	6.9	24	25	1,039	2.4	9				
GREATER LAWRENCE	114	1,563	7.2	27	112	1,439	7.7	29				
GREATER NEW BEDFORD	75	1,918	3.9	15	111	1,837	6.0	22				
GREATER LOWELL	114	2,198	5.1	19	88	2,216	3.9	15				
SOUTH MIDDLESEX	49	912	5.3	20	71	909	7.8	28				
MONTACHUSSETT	62	1,018	6.0	23	93	1,014	9.1	32				
NORTH BERKSHIRE	8	416	1.9	8	5	400	1.2	5				
NASHOBA VALLEY	24	688	3.4	13	26	611	4.2	16				
NORTHEAST METRO	15	1,315	1.1	5	—	—	—	—				
NORTH SHORE	45	416	10.8	36	54	375	14.4	46				
OLD COLONY	17	535	3.1	13	18	544	3.3	12				
PATHFINDER	21	445	4.7	17	20	449	4.4	16				

Because 1987-88 dropout data are generally more accurate than the previous year's data, comparisons between the two years may be unreliable in some cases.

**Appendix C**  
**Massachusetts Dropout Data**  
**By School District**

School District	Number Dropouts	1986-87			1987-88			
		Oct-87 Enrollment	Annual Dropout Rate(%)	Proj. 4 YR Dropout Rate(%)	Number Dropouts	Oct-88 Enrollment	Annual Dropout Rate(%)	
Grades 9-12	Grades 9-12	Grades 9-12	Grades 9-12	Grades 9-12	Grades 9-12	Grades 9-12	Proj. 4 YR Dropout Rate(%)	
SHAWSHEEN VALLEY	19	1,474	1.2	5	111	1,362	8.1	29
SOUTHEASTERN	25	1,285	1.9	8	35	1,281	2.7	11
SOUTH SHORE	12	526	2.2	9	7	484	1.4	5
SOUTHERN WORCESTER	26	916	2.8	11	37	916	4.0	15
TRI COUNTY	21	810	2.5	9	31	736	4.2	16
UPPER CAPE COD	24	520	4.6	18	36	491	7.3	26
WHITTIER	105	1,209	8.6	31	94	1,157	8.1	28
BRISTOL COUNTY	13	243	5.3	21	15	238	6.3	24
ESSEX COUNTY	8	308	2.6	11	11	321	3.4	14
NORFOLK COUNTY	7	256	2.7	10	4	287	1.3	6

Because 1987-88 dropout data are generally more accurate than the previous year's data, comparisons between the two years may be unreliable in some cases.



## Appendix D Kind of Community Listings

1111

卷之三

2001

Inhalation 1999

Environ Biol Fish (2007) 79:103–110

卷之三

卷之三

—DIRECTORS—  
ALVIN ROLSTON  
DOVIE ANTHONY  
CUSTON BYRNE  
HAMILTON VERNON  
HARVEY WILBERMAN  
LINE PHILIP  
LINCOLN STROHAY  
MASCHERET  
NEILSON UPTON  
NASHUA  
PETERSON  
VACKERS

CENTRAL JEWISHNESS	SOVIET CHAOTIC	GERMAN	SPANISH	SCOTTISH
FRONTIERS	CIVIL MONTSERRAT	MONASTIC TRAIL	PARADISEST	PIRANHA COAST
1914	1914	1914	1914	1914
1914	1914	1914	1914	1914
1914	1914	1914	1914	1914

WEST INDIAN  
WHITE LECOM  
— INDIANIS—  
DISTRICT 1917  
CATIVAT  
KAMPING  
KALVINGT  
NORTH MINNESOTA  
— INDIANIS—  
MUSKOGEE

REVUE CRITIQUE

四百四

Massachusetts Department of Education  
Office of Planning, Research and Evaluation  
1385 Hancock Street  
Quincy, Massachusetts 02169-05183

Nonprofit  
U.S. POSTAGE  
*PAID*  
Permit No. 55623  
Boston, MA



